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EXAMINER	
JIANG, SHAOJIA A	

ART UNIT	PAPER NUMBER
1617	

DATE MAILED: 02/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/069,744	COPLAND ET AL.	
	Examiner	Art Unit	
	Shaojia A. Jiang	1617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 November 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This Office Action is a response to Applicant's amendment and response filed on November 12, 2004 wherein claims 2-19 have been amended since claim 2 has been amended. Claims 1 and 20-21 are cancelled previously.

Currently, claims 2-19 are pending in this application.

Claims 2-19 are currently under examination on the merits.

Applicant's amendment amending claim 2, filed November 12, 2004 with respect to the rejection made under 35 U.S.C. 112 first paragraph for lack of scope of enablement for any oxytocin-mediated action of record stated in the Office Action dated May 19, 2004 has been fully considered and is found persuasive to overcome the rejection since the particular oxytocin-mediated action has been recited. Therefore, the said rejection is withdrawn.

Applicant's amendment amending claims 8-9, filed November 12, 2004 with respect to the rejection of 8-9 made under 35 U.S.C. 112 second paragraph for use of the indefinite recitation " the thiazolidinedione comprises troglitazone" and "the thiazolidinedione comprises pioglitazone, 8RL49653, or a compound related to troglitazone" of record stated in the Office Action dated May 19, 2004 have been fully considered and found persuasive only as to these particular recitation.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 15-16 are rejected under 35 U.S.C. 112, first paragraph, for scope of enablement because the specification, while being enabling for the particular and specific tocolytic agents or the particular and specific beta-mimetic, the particular and specific prostaglandin inhibitors, or the particular and specific calcium-blocking agents, such as ritodrine, magnesium sulfate, indomethacin, and nifedipine disclosed in the specification in co-administering with thiazolidinedion herein, does not reasonably provide enablement for any substances or compounds or agents represented by "one beta-mimetic", "at least one prostaglandin inhibitor", or " one calcium-blocking agent" recited in the claims herein, for the same reasons of record stated in the Office Action dated May 19, 2004.

These recitations, "one beta-mimetic", "at least one prostaglandin inhibitor", or " one calcium-blocking agent", are seen to be merely functional language.

The instant specification fails to provide information that would allow the skilled artisan to fully practice the instant invention without ***undue experimentation***. Attention is directed to *In re Wands*, 8 USPQ2d 1400 (CAFC 1988) at 1404 where the court set forth the eight factors to consider when assessing if a disclosure would have required undue experimentation. Citing *Ex parte Forman*, 230 USPQ 546 (BdApls 1986) at 547 the court recited eight factors:

(1) the nature of the invention; (2) the state of the prior art; (3) the relative skill of those in the art; (4) the predictability or unpredictability of the art; (5) the breadth of the claims; (6) the amount of direction or guidance presented; (7) the presence or absence of working examples; and (8) the quantity of experimentation necessary.

The nature of the invention: The instant invention pertains the methods for reducing oxytocin-mediated action in a mammal.

The relative skill of those in the art: The relative skill of those in the art is high.

The breadth of the claims: The instant claims are deemed very broad since the claims read on any substances or compounds or agents represented by "one beta-mimetic", "at least one prostaglandin inhibitor", or " one calcium-blocking agent" in co-administering with thiazolidinedion herein for reducing any oxytocin-mediated action in a mammal.

The amount of direction or guidance presented:

Functional language at the point of novelty, as herein employed by Applicants, is admonished in *University of California v. Eli Lilly and Co.* 43 USPQ2d 1398 (CAFC, 1997) at 1406: stating this usage does "little more than outline goal appellants hope the recited invention achieves and the problems the invention will hopefully ameliorate". The CAFC further clearly states that "[A] written description of an invention involving a chemical genus, like a description of a chemical species, requires a precise definition, such as by structure, formula, [or] chemical name, of the claimed subject matter sufficient to distinguish it from other materials" at 1405(emphasis added), and that "It does not define any structural features commonly possessed by members of the genus that distinguish from others. One skilled in the art therefore cannot, as one can do with a

fully described genus, visualize or recognize the identity of the members of the genus. A definition by function, as we have previously indicated, does not suffice to define the genus.." at 1406 (emphases added).

In the instant case, "one beta-mimetic", "at least one prostaglandin inhibitor", or " one calcium-blocking agent", recited in the instant claims are purely functional distinction. Hence, these functional recitations read on any compounds that might have the recited functions. However, the specification merely provides those particular and specific compounds for each kind of functional compounds for the method of treatment herein.

Thus, Applicants functional language at the points of novelty fails to meet the requirements set forth under 35 U.S.C. 112, first paragraph. Claims employing functional language at the exact point of novelty, such as Applicants', neither provide those elements required to practice the inventions, nor "inform the public during the life of the patent of the limited of monopoly asserted" (*General Electric Company v. Wabash Appliance Corporation et al.* 37 USPQ at 468 (US Supreme Court 1938)).

The predictability or unpredictability: the instant claimed invention is highly *unpredictable* as discussed below:

It is noted that the pharmaceutical art is unpredictable, requiring each embodiment to be individually assessed for physiological activity. *In re Fisher*, 427 F.2d 833, 166 USPQ 18 (CCPA 1970) indicates that the more unpredictable an area is, the more specific enablement is necessary in order to satisfy the statute. In the instant case, the instant claimed invention is highly unpredictable since one skilled in the art

cannot fully described genus, visualize or recognize the identity of the members of the genus, by structure, formula, or chemical name, of the claimed subject matter, as discussed above in *University of California v. Eli Lilly and Co.* Hence, in the absence of fully recognizing the identity of the members genus herein, one of skill in the art would be unable to fully predict possible physiological activities of any compounds having claimed functional properties in the method of the particular treatment herein.

Moreover, one of skill in the art would recognize that it is highly unpredictable in regard to therapeutic effects for the particular treatment herein, side effects, and especially serious toxicity that may be generated by drug-drug interactions when and/or after administering to a host (e.g., a human) the ***combination*** of any compounds represented by "one beta-mimetic", "at least one prostaglandin inhibitor", or " one calcium-blocking agent", which especially broadly encompass those known and **unknown** compounds of the recited functional compounds as of the instant filing date, as well as those **future** known compounds, that require additional or future research to establish or verify their usefulness.

See text book "Goodman & Gilman's The Pharmacological Basis of Therapeutics" regarding possible drug-drug interactions (9th ed, 1996) page 51 in particular. This book teaches that "The frequency of significant beneficial or adverse drug interactions is unknown" (see the bottom of the left column of page 51) and that "Recognition of beneficial effects and recognition of and prevention of adverse drug interactions require a thorough knowledge of the intended and possible effects of drugs that are prescribed" and that "The most important adverse drug-drug interactions occur

with drugs that have serious toxicity and a low therapeutic index, such that relatively small changes in drug level can have significant adverse consequences" (see the right column of page 51) (emphases added). In the instant case, in the absence of fully recognizing the identity of the members genus herein, one of skill in the art would not be able to fully predict possible adverse drug-drug interactions occurring with many combinations of any compounds having claimed functional properties in the pharmaceutical compositions herein to be administered to a host. Thus, the teachings of the book clearly support that the instant claimed invention is highly unpredictable.

The presence or absence of working examples and the quantity of experimentation necessary:

Moreover, it is noted that the specification fails to provide working examples, i.e., testing results or data to demonstrate the instant combinations with different combinations to be administered to a host, for reducing any oxytocin-mediated action in a mammal.

Thus, the specification fails to provide **sufficient** support of the broad use of any compounds having those functions recited in the instant claims. As a result, necessitating one of skill to perform an exhaustive search and undue experimentation for the embodiments of any compounds having those functions recited in the instant claims suitable to practice the claimed invention.

As discussed above, *Genentech*, 108 F.3d at 1366, states that "a patent is not a hunting license. It is not a reward for search, but compensation for its successful

conclusion" and "[p]atent protection is granted in return for an enabling disclosure of an invention, not for vague intimations of general ideas that may or may not be workable".

Therefore, in view of the *Wands* factors, the case *University of California v. Eli Lilly and Co.* (CAFC, 1997) and *In re Fisher* (CCPA 1970) discussed above, to practice the claimed invention herein, a person of skill in the art would have to engage in *undue experimentation* to test all compounds encompassed in the instant claims and their combinations employed in the claimed method to be administered to a host, with no assurance of success.

Response to Argument

Applicant's arguments filed November 12, 2004 with respect to this rejection made under 35 U.S.C. 112, first paragraph, for lack of full scope of enablement of record in the previous Office Action have been fully considered but are not deemed persuasive as further discussed below.

Applicant asserts that "Applicants' specification provides non-limiting examples of particular beta-mimetics, prostaglandin inhibitors and calcium-blocking agents that can be used in combination with a thiazolidendione compotmd. See, e.g., the specification at pages 13 and 14" and that "[t]he fact that the use of tocolytic agents are known in the art is strong evidence that undue experimentation would not be required to also administer thiazolidendione in combination with tocolytic agents".

However, given their broadest reasonable interpretation during patent examination as noted in MPEP 2111, the instant claims are **not** limited to those particular known agents such as ritodrine, magnesium sulfate, indomethacin, and

nifedipine disclosed in the specification. On the contrary the instant claims read on administering to a patient the ***combination*** of any substances or compounds or agents represented by "one beta-mimetic", "at least one prostaglandin inhibitor", or " one calcium-blocking agent", and thiazolidinedion herein for reducing any oxytocin-mediated action in a mammal.

These functional recitations may reasonably encompass those known and **unknown** or **future known** compounds having the recited functions as of the instant filing date. Note that those **future known** compounds have not yet been discovered and/or made as of the instant filing date. Hence, those unknown or future known compounds encompassed by claim 1 herein **must** require to additional or future research to discover, establish, make and/or verify their usefulness. Therefore, as indicated in the previous Office Action, the skilled artisan has to exercise **undue experimentation** to practice the instant invention.

As noted in MPEP 2164.01, "Any analysis of whether a particular claim is supported by the disclosure in an application requires a determination of whether that disclosure, when filed, contained sufficient information regarding the subject matter of the claims as to enable one skilled in the pertinent art to make and use the claimed invention. The standard for determining whether the specification meets the enablement requirement was cast in the Supreme Court decision of Mineral Separation v. Hyde, 242 U.S. 261, 270 (1916) which postured the question: is the experimentation needed to practice the invention undue or unreasonable? That standard is still the one to be applied. In re Wands, 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988).

In this case, those Wands factors have been clearly discussed in the previous Office Action. Again, in the absence of fully recognizing the identity of the members genus herein, one of skill in the art would be unable to fully predict possible physiological activities of any compounds having claimed functional properties in the method of the particular treatment herein.

Moreover, one of skill in the art would recognize that it is highly unpredictable in regard to therapeutic effects for the particular treatment herein, side effects, and especially serious toxicity that may be generated by drug-drug interactions when and/or after administering to a host (e.g., a human) the ***combination*** encompassed by the claims herein. See text book "Goodman & Gilman's The Pharmacological Basis of Therapeutics" regarding possible drug-drug interactions (9th ed, 1996) page 51 in particular.

Further, it is noted that the specification fails to provide working examples, i.e., testing results or data to demonstrate the instant combinations with different combinations to be administered to a host, for reducing any oxytocin-mediated action in a mammal.

Thus, the specification fails to provide clear and convincing evidence in sufficient support of the broad use of any compounds having those functions recited in the instant claims. As a result, necessitating one of skill to perform an exhaustive search and undue experimentation for the embodiments of any compounds having those functions recited in the instant claims suitable to practice the claimed invention, given the fact that the pharmaceutical art is unpredictable, requiring each embodiment to be individually

assessed for physiological activity. *In re Fisher*, 427 F.2d 833, 166 USPQ 18 (CCPA 1970). .

For the above stated reasons, said claims are properly rejected made under 35 U.S.C. 112, first paragraph, for lack of full scope of enablement.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, for the same reasons of record stated in the Office Action dated May 19, 2004.

The recitation "a subject" renders these claims indefinite. The recitation "a subject" is not clearly defined in the claims or specification. One of ordinary skill in the art could not ascertain and interpret the metes and bounds of the patent protection desired as to what "a subject" would be, for example, that the term " subject " would be a single cell, any biological system, an animal, or a mammal or a human or any subject. Thus, one of ordinary skill in the art could not interpret encompassed thereby.

Claim 9 contains the abbreviation or trademark/trade name BRL49653. Where a trademark or trade or abbreviation name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218

USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the abbreviation or trademark or trade name cannot be used properly to identify any particular material or product. A abbreviation or trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a abbreviation or trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the abbreviation trademark/trade name or abbreviation is used to identify/describe particular agent, accordingly, the identification/description is indefinite.

The recitation, "a compound related to troglitazone" in claim 9 render claim 9 indefinite. Hence, one of ordinary skill in the art could not ascertain and interpret the metes and bounds of the patent protection desired as to "a compound related to troglitazone" of various kinds of compounds since any significant structural variation to a compound would be reasonably expected to alter its properties, e.g., physiological effects and functions. Thus, it is unclear as to what "a compound related to troglitazone" of compounds herein would be encompassed thereby.

Response to Argument

Applicant's arguments filed November 12, 2004 with respect to this rejection made under 35 U.S.C. 112, second paragraph of record in the previous Office Action have been fully considered but are not deemed persuasive as further discussed below.

Applicant asserts that "Applicants' specification and claims provide non-limiting examples of "subjects" that are contemplated by the present invention. See, e.g., the specification at page 4, lines 21-23". Contrary to Applicant's assertion, the specification at page 4, lines 21-23, is not seen to clearly define what "subject" is. Thus, the instant

claims are clearly not limited to those particular examples described in the specification; exemplification is not an explicit definition.

Applicant is suggested to amend claim 9 by reciting the real name taught in the specification at page 15, line 30 for BRL49653.

Applicant argues that the specification defines "A compound related to troglitazone is one that is substantially similar to the chemical structure of troglitazone or can be derived from troglitazone" (see page 5, line 8-10). Applicant's argument is not found persuasive, since one of ordinary skill in the art could not ascertain and interpret the metes and bounds of the patent protection desired as to "a compound related to troglitazone" of various kinds of compounds having many possible substitutents, given the fact that any significant structural variation to a compound would be reasonably expected to alter its properties, e.g., physiological effects and functions. Thus, it is unclear as to what "a compound related to troglitazone" of compounds herein would be encompassed thereby.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Antonucci et al. (US 5457109, PTO-892) in view of Hanif et al. (PTO-892) and Soloff et al. and Fuchs et al. (PTO-1449 submitted May 20, 2002), for the same reasons of record stated in the Office Action dated May 19, 2004.

Antonucci et al. discloses that the particular thiazolidinedione compounds having formula I which covers and encompasses the instant particular thiazolidinedione such as, troglitazone (see its chemical name disclosed at col.15 lines 26-28), is useful in methods for the treatment of normal pregnant women or non-diabetic pregnant women due to insulin resistance and/or related risks (see col.3 and Example 1 at col.18 lines 35-46). Antonucci et al. also discloses various routes for administering the particular thiazolidinedione compound to a host (see col.18-24).

Antonucci et al. does not expressly disclose the employment of the particular thiazolidinedione compounds, in methods for reducing oxytocin-mediated action in a pregnant mammal such as the reduction of inducing labor and uterine cramps or contraction in a pregnant mammal, inducing milk letdown, and inducing prostaglandin release.

Hanif et al. teaches that "oxytocin confers a state of insulin resistance on the adipocyte, probably acting at a post-receptor site". Hanif et al. also teaches that "apparently, in the adipocyte, oxytocin acts via the same receptor as is present in uterine and breast smooth muscle and the metabolic actions of oxytocin are due to mechanisms in common (chem. mediators, phosphorylation-dephosphorylatio reactions) with the ones involved in the action of insulin. See abstract in particular.

Known functions of oxytocin (OT) include smooth muscle contraction during birth (see Soloff et al. 1989 and Fuchs et al. 1982), milk letdown during lactation (see Soloff et al. 1979) and prostaglandin release from endometrium/deciduas and the anmnion (see Hinko and Soloff et al. 1993).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the particular thiazolidinedione compounds, in methods for reducing oxytocin-mediated action in a pregnant mammal such as inducing labor and uterine cramps or contraction in a pregnant mammal, inducing milk letdown, and inducing prostaglandin release.

One having ordinary skill in the art at the time the invention was made would have been motivated to employ the particular thiazolidinedione compounds, in methods for reducing oxytocin-mediated action in a pregnant mammal such as the reduction of inducing labor and uterine cramps or contraction in a pregnant mammal, inducing milk letdown, and inducing prostaglandin release, because thiazolidinedione compounds are known to be useful in methods for the treatment of normal pregnant women or non-diabetic pregnant women due to insulin resistance and/or related risks according to Antonucci et al. It is also known that teaches that oxytocin confers a state of insulin resistance on the adipocyte, probably acting at a post-receptor site and in the adipocyte, oxytocin acts via the same receptor as is present in uterine and breast smooth muscle and the metabolic actions of oxytocin are due to mechanisms in common with the ones involved in the action of insulin according to Hanif et al. Moreover, oxytocin (OT) functions are known to include smooth muscle contraction during birth, milk letdown

during lactation and prostaglandin release from endometrium/deciduas and the anmnion according to the prior art.

Therefore, one of ordinary skill in the art would have reasonably expected that particular thiazolidinedione compounds, would have beneficial therapeutic effects and usefulness in methods for reducing oxytocin-induced action in a pregnant mammal such as inducing labor and uterine cramps or contraction in a pregnant mammal, inducing milk letdown, and inducing prostaglandin release, by common mechanisms with the ones involved in the action of insulin e.g., treating insulin resistant,as reducing or decreasing oxytocin-induced actions.

Claims 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Antonucci et al. (US 5457109, PTO-892) in view of Hanif et al. (PTO-892) and Soloff et al. and Fuchs et al. (PTO-1449 submitted May 20, 2002) further in view of Dullien (US 5,370,135, PTO-892), for the same reasons of record stated in the Office Action dated May 19, 2004.

The same disclosures of Antonucci et al. (US 5457109) in view of Hanif et al. and Soloff et al. and Fuchs et al. have been discussed in the 103(a) rejection set forth above.

The prior art does not expressly disclose the employment of a tocolytic agent in combination with thiazolidinedione in methods for reducing oxytocin-mediated action in a pregnant mammal such as inducing labor and uterine cramps or contraction in a pregnant mammal, inducing milk letdown, and inducing prostaglandin release.

Dullien teaches that a number of known tocolytic agents are known to be used for treating premature labor or pre-term labor by reducing uterine contractions (see col.1).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ a tocolytic agent in combination with thiazolidinedione in methods for reducing oxytocin-mediated action in a pregnant mammal such as inducing labor and uterine cramps or contraction in a pregnant mammal, inducing milk letdown, and inducing prostaglandin release.

One having ordinary skill in the art at the time the invention was made would have been motivated to a tocolytic agent in combination with thiazolidinedione in methods for reducing oxytocin-mediated action in a pregnant mammal such as inducing labor and uterine cramps or contraction in a pregnant mammal, inducing milk letdown, and inducing prostaglandin releasesince, since a number of known tocolytic agents are known to be used for treating premature labor or pre-term labor by reducing uterine contractions based on the teaching of Dullien.

Therefore, one of ordinary skill in the art would have reasonably expected that combining thiazolidinedione and a known tocolytic agent, both known useful for the same purpose, i.e., treating premature labor or pre-term labor by reducing uterine contractions, would improve the therapeutic effects for treating the same diseases, and/or would produce additive therapeutic effects in treating the same.

It has been held that it is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for same purpose in order to form third

composition that is to be used for very same purpose; idea of combining them flows logically from their having been individually taught in prior art. See *In re Kerkhoven*, 205 USPQ 1069, CCPA 1980.

Thus the claimed invention as a whole is clearly prima facie obvious over the combined teachings of the prior art.

Response to Argument

Applicant's arguments filed November 12, 2004 with respect to this rejection made under 35 U.S.C. 103(a) of record in the previous Office Action have been fully considered but are not deemed persuasive as to the nonobviousness of the claimed invention over the prior art as further discussed below.

Applicant asserts that "[t]here is no motivation to combine the cited references, and the Action has provided no evidence to the contrary" and that "[I]t appears that the action is equating an "obvious to try" rationale to support the obviousness rejection.

In contrast to applicant's assertions of the rejection is based upon an "obvious-to-try" standard; it is by now well understood that the ultimate conclusion of law that claimed subject matter as a whole would have been obvious under 35 USC 103 may at times properly be drawn from an inference of fact arising from prior art teachings which could be considered an inference that it would be "obvious to try" that which is claimed. In re O'Farrell, 853 F.2d 894, 7 USPQ 2d 1973 (Fed. Cir. 1988); Contour Saws Inc. v. Starrett Co., 444 F. 2d 433, 170 USPQ 433 (Ct.App. 1977); In re Marzocchi, 439 F. 2d

220, 169 USPQ 367 (CCPA 1977); In re Lindell, 385 F. 2d 435, 155 USPQ 521 (CCPA 1967).

Moreover, it must be recognized that any judgment on obviousness takes into account knowledge which was generally available and within the level of ordinary skill at the time the claimed invention was made. In this case, thiazolidinedione compounds are known to be useful in methods for the treatment of normal pregnant women or non-diabetic pregnant women due to insulin resistance and/or related risks according to Antonucci et al. It is also known that teaches that oxytocin confers a state of insulin resistance on the adipocyte, probably acting at a post-receptor site and in the adipocyte, oxytocin acts via the same receptor as is present in uterine and breast smooth muscle and the metabolic actions of oxytocin are due to mechanisms in common with the ones involved in the action of insulin according to Hanif et al. Moreover, oxytocin (OT) functions are known to include smooth muscle contraction during birth, milk letdown during lactation and prostaglandin release from endometrium/deciduas and the anmnion according to the prior art.

Therefore, one of ordinary skill in the art would have reasonably expected that particular thiazolidinedione compounds, would have beneficial therapeutic effects and usefulness in methods for reducing oxytocin-induced action in a pregnant mammal such as inducing labor and uterine cramps or contraction in a pregnant mammal, inducing milk letdown, and inducing prostaglandin release, by common mechanisms with the ones involved in the action of insulin e.g., treating insulin resistant, as reducing or decreasing oxytocin-induced actions, as pointed out in the previous Office Action.

Applicant also asserts that "the Antonucci et al. reference is non-analogous art" and "Antonucci et al. does not concern Applicants' field of endeavor and is not reasonably pertinent to reducing the induction of labor". One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. In re Keller, 642 F.2d 413, 208 SPQ 871 (CCPA 1981); In re Merck & Co., Inc., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). See MPEP 2145.

Therefore, as discussed above, the motivation provided by the combined teachings of the prior art to make the present invention is seen. The claimed invention is obvious in view of the prior art.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 2 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3 of U.S. Patent No. 6,537,566.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the patent is drawn to a method of treating uterine fibroids by administering the fibroid cell growth inhibitor, a thiazolidinedione (see claim 3 of the patent) which is the same active agent to be administered herein.

The claim of the instant application is drawn to a method for reducing oxytocin-mediated action in a subject. One having ordinary skill in the art at the time the invention was made would recognize that a method for reducing oxytocin-mediated action in a subject administering the thiazolidinedione compound would encompass a method of treating uterine fibroids also by administering the same thiazolidinedione compound. Thus these methods between in the patent and in the instant application are seen to substantially overlap.

Thus, the instant claim 2 is seen to be obvious over the claims 1-3 of U.S. Patent No. 6,537,566.

Applicant is requested to note that the obviousness-type double patenting rejection of record in the previous Office Action was intended to reject claim 2 not the cancelled claim 1, since the context of the rejection clearly indicates claim 2. The typographic error is regretted.

In view of the rejections to the pending claims set forth above, no claims are allowed.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Jiang, whose telephone number is (571)272-0627. The examiner can normally be reached on Monday-Friday from 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreenivasan Padmanabhan, Ph.D., can be reached on (571)272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

S. Anna Jiang, Ph.D.
Primary Examiner
Art Unit 1617
February 9, 2005